

What is claimed:

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1. A method for accelerating the sales transactions of customers in a retail store, comprising the acts of:
- reading a customer payment card number at a customer checkout accelerator;
 - determining a preapproval amount for the sales transaction;
 - displaying the preapproval sales transaction amount to the customer on the customer checkout accelerator for acceptance;
 - transmitting the preapproval amount to an external card services system for approval; and
 - storing the approval amount in a preapproval cache at a point of sales terminal for use in completing the sales transaction.
2. The method for accelerating the sales transactions of customers in a retail store of claim 1 further comprising the act of transmitting the preapproval amount from the customer checkout accelerator to a store controller.
3. The method for accelerating the sales transactions of customers in a retail store of claim 2 further comprising placing an entry in a preapproval database if the external card services system approves the transaction amount.

4. The method for accelerating the sales transactions of customers in a retail store of claim 3 further comprising notifying a point of sales terminal of the approval amount.
5. The method for accelerating the sales transactions of customers in a retail store of claim 1 further comprising the act of determining if the payment card is one or more of a credit card, a debit card, a customer loyalty card, an electronic/Internet wallet, or an electronic gift certificate.
6. The method for accelerating the sales transactions of customers in a retail store of claim 5 wherein if the payment card is a customer loyalty card, determining a preapproval amount that is based on an actual purchase history for the customer.
7. The method for accelerating the sales transactions of customers in a retail store of claim 5 wherein if the payment card is a credit or debit card, determining a preapproval amount that is based on an average customer purchase amount for credit and debit transactions on a store wide basis.
8. The method for accelerating the sales transactions of customers in a retail store of claim 1 further comprising the act of manually entering a specific preapproval amount by the customer.

9. The method for accelerating the sales transactions of customers in a retail store of claim 1 further comprising the acts of:

scanning the customer payment card at a point of sales terminal;
determining if there is an entry for the customer in the preapproval cache; and
resuming the sales transaction at the point of sale terminal.

10. The method for accelerating the sales transactions of customers in a retail store of claim 9 wherein the act of resuming the sales transaction comprises the acts of:

comparing the actual sales transaction amount with the preapproval amount;
updating a preapproval database with the actual sales transaction amount; and
releasing the difference between the preapproval amount and the actual sales transaction amount in the preapproval database.

11. The method for accelerating the sales transactions of customers in a retail store of claim 1 further comprising the act of printing a sales transaction receipt and a credit or debit voucher.

12. The method for accelerating the sales transactions of customers in a retail store of claim 9 wherein if there is no entry for the customer in the preapproval cache, retrieving the preapproval amount from a preapproval database on a store controller file server.

13. The method for accelerating the sales transactions of customers in a retail store of claim 10 wherein the act of resuming the sales transaction includes the acts of:

scanning the items selected by the customer for purchase during the sales transaction;
determining a subtotal purchase amount after each item is scanned;
determining if the subtotal amount exceeds the preapproval amount; and
dynamically requesting an additional amount for approval during the sales transaction, if the subtotal amount exceeds the preapproval amount.

14. The method for accelerating the sales transactions of customers in a retail store of claim 13 further comprising the acts of:

transmitting an additional preapproval amount from the external card services system;
updating the preapproval cache with the additional preapproval amount if approved; and
notifying the operator of the point of sale terminal if the additional preapproval amount is denied.

15. The method for accelerating the sales transactions of customers in a retail store of claim 1 further comprising the act of displaying on the customer checkout accelerator a selection of special promotional merchandise that can be added to the sales transaction, wherein some or all of the promotional merchandise can be made available through a hyperlink to one or more Internet web sites.

16. The method for accelerating the sales transactions of customers in a retail store of claim 15 further comprising the acts of:
- creating a record of any additional items added to the sales transaction;
- appending the additional items record to a preapproval database entry for the sales transaction.
17. The method for accelerating the sales transactions of customers in a retail store of claim 16 further comprising the act of reading the additional items record into a sales transaction record at a point of sale terminal.
18. The method for accelerating the sales transactions of customers in a retail store of claim 17 further comprising the acts of updating a vendor-based tracking database to bill the vendor for displaying a vendor advertisement on the customer checkout accelerator when the approval from the external card services system is approved.
19. The method for accelerating the sales transactions of customers in a retail store of claim 1 further comprising the acts of:
- configuring a selection of additional categories of items to be displayed on the customer checkout accelerator based on customer preferences wherein some or all of the

categories of items can be made available through a hyperlink to one or more Internet web sites; and
storing the category selections in a customer loyalty database that is maintained by the retail store.

20. The method for accelerating the sales transactions of customers in a retail store of claim 19 further comprising the act of displaying on the customer checkout accelerator a selection of special promotional merchandise in the customer selected categories that can be added to the sales transaction wherein some or all of the promotional merchandise can be made available through a hyperlink to one or more Internet web sites.

21. The method for accelerating the sales transactions of customers in a retail store of claim 20 further comprising the acts of:

creating a record of any additional items added to the sales transaction;

appending the additional items record to a preapproval database entry for the sales transaction.

22. The method for accelerating the sales transactions of customers in a retail store of claim 21 further comprising the act of reading the additional items record into a sales transaction record at a point of sale terminal.

23. The method for accelerating the sales transactions of customers in a retail store of claim 22 further comprising the acts of updating a vendor-based tracking database to bill the vendor for displaying on the customer checkout accelerator a vendor advertisement for merchandise that can be made available through a hyperlink to the vendor's Internet web site when the approval from the external card services system is approved.

24. A computer readable medium containing a computer program product for accelerating the sales transactions of customers in a retail store, comprising:

program instructions that read a customer payment card number at a customer checkout accelerator;

program instructions that determine a preapproval amount for the sales transaction;

program instructions that display the preapproval sales transaction amount to the customer on the customer checkout accelerator for acceptance;

program instructions that transmit the preapproval amount to an external card services system for approval; and

program instructions that store the approval amount in a preapproval cache at a point of sales terminal for use in completing the sales transaction.

25. The computer program product for accelerating the sales transactions of customers in a retail store of claim 24 further comprising program instructions that transmit the preapproval amount from the customer checkout accelerator to a store controller.
26. The computer program product for accelerating the sales transactions of customers in a retail store of claim 25 further comprising program instructions that place an entry in a preapproval database if the external card services system approves the transaction amount.
27. The computer program product for accelerating the sales transactions of customers in a retail store of claim 26 further comprising program instructions that notify a point of sales terminal of the approval amount.
28. The computer program product for accelerating the sales transactions of customers in a retail store of claim 27 further comprising program instructions that determine if the payment card is one or more of a credit card, a debit card, a customer loyalty card, an electronic/Internet wallet or an electronic gift certificate.
29. The computer program product for accelerating the sales transactions of customers in a retail store of claim 28 further comprising program instructions that determine a preapproval amount that is based on an actual purchase history for the customer if the payment card is a customer loyalty card.

30. The computer program product for accelerating the sales transactions of customers in a retail store of claim 28, further comprising program instructions that determine a preapproval amount that is based on an average customer purchase amount for credit and debit transactions on a store wide basis if the payment card is a credit or debit card.

31. The computer program product for accelerating the sales transactions of customers in a retail store of claim 24 further comprising:

program instructions that scan the customer payment card at a point of sales terminal;

program instructions that determine if there is an entry for the customer in the preapproval cache; and

program instructions that resume the sales transaction at the point of sale terminal.

32. The computer program product for accelerating the sales transactions of customers in a retail store of claim 31 wherein the program instructions that resume the sales transaction comprise:

program instructions that compare the actual sales transaction amount with the preapproval amount;

program instructions that update a preapproval database with the actual sales transaction amount; and

program instructions that release the difference between the preapproval amount and the actual sales transaction amount in the preapproval database.

33. The computer program product for accelerating the sales transactions of customers in a retail store of claim 24 further comprising program instructions that print a sales transaction receipt and a credit or debit voucher.
34. The computer program product for accelerating the sales transactions of customers in a retail store of claim 31, further comprising program instructions that retrieve the preapproval amount from a preapproval database on a store controller file server if there is no entry for the customer in the preapproval cache.
35. The computer program product for accelerating the sales transactions of customers in a retail store of claim 32 wherein the program instructions that resume the sales transaction further include:
- program instructions that scan the items selected by the customer for purchase during the sales transaction;
 - program instructions that determine a subtotal purchase amount after each item is scanned;
 - program instructions that determine if the subtotal amount exceeds the preapproval amount; and
 - program instructions that dynamically request an additional amount for approval during the sales transaction, if the subtotal amount exceeds the preapproval amount.

36. The computer program product for accelerating the sales transactions of customers in a retail store of claim 35 further comprising:

program instructions that transmit an additional preapproval amount from the external card services system;

program instructions that update the preapproval cache with the additional preapproval amount if approved; and

program instructions that notify the operator of the point of sale terminal if the additional preapproval amount is denied.

37. The computer program product for accelerating the sales transactions of customers in a retail store of claim 24 further comprising program instructions that display on the customer checkout accelerator a selection of special promotional merchandise that can be added to the sales transaction, wherein some or all of the promotional merchandise can be made available through a hyperlink to one or more Internet web sites.

38. The computer program product for accelerating the sales transactions of customers in a retail store of claim 37 further comprising:

program instructions that create a record of any additional items added to the sales transaction;

program instructions that append the additional items record to a preapproval database entry for the sales transaction.

39. The computer program product for accelerating the sales transactions of customers in a retail store of claim 38 further comprising program instructions that read the additional items record into a sales transaction record at a point of sale terminal.

40. The computer program product for accelerating the sales transactions of customers in a retail store of claim 39 further comprising program instructions that update a vendor-based tracking database to bill the vendor for displaying a vendor advertisement on the customer checkout accelerator for merchandise that can be made available through a hyperlink to the vendor's Internet web site when the approval from the external card services system is approved.

41. The computer program product for accelerating the sales transactions of customers in a retail store of claim 24 further comprising:

program instructions that configure a selection of additional categories of items to be displayed on the customer checkout accelerator based on customer preferences, wherein some or all of the categories of items can be made available through a hyperlink to one or more Internet web sites; and

program instructions that store the category selections in a customer loyalty database that is maintained by the retail store.

42. The computer program product for accelerating the sales transactions of customers in a retail store of claim 41 further comprising program instructions that display on the customer checkout accelerator a selection of special promotional merchandise in the customer selected categories that can be added to the sales transaction, wherein some or all of the promotional merchandise can be made available through a hyperlink to one or more Internet web sites.

43. The computer program product for accelerating the sales transactions of customers in a retail store of claim 42 further comprising:

program instructions that create a record of any additional items added to the sales transaction;

program instructions that append the additional items record to a preapproval database entry for the sales transaction.

44. The computer program product for accelerating the sales transactions of customers in a retail store of claim 43 further comprising program instructions that read the additional items record into a sales transaction record at a point of sale terminal.

45. The computer program product for accelerating the sales transactions of customers in a retail store of claim 44 further comprising program instructions that update a vendor-based tracking database to bill the vendor for displaying on the customer checkout accelerator a vendor advertisement for merchandise that can be made available through a hyperlink to the vendor's web site when the approval from the external card services system is approved.

46. A system for accelerating the sales transactions of customers in a retail store, comprising:

- a customer checkout accelerator that provides a customer user interface that is used to initiate a request for a preapproval amount for a sales transaction;
- a card reader attached to, or integrated into, the customer checkout accelerator that reads a customer payment card number when the card is swiped through the card reader;
- a customer checkout accelerator server module residing on a store controller server that determines a preapproval amount for the sales transaction and transmits the preapproval amount to an external card services system for approval; and
- a preapproval cache located at a point of sales terminal that stores the approval amount for use in completing the sales transaction.

47. The system for accelerating the sales transactions of customers in a retail store of claim 46 further comprising a preapproval database for storing a record for each approved sales transaction amount.

48. The system for accelerating the sales transactions of customers in a retail store of claim 47 wherein the preapproval database is a keyed access file.

49. The system for accelerating the sales transactions of customers in a retail store of claim 47 wherein the preapproval database is a relational database.

50. The system for accelerating the sales transactions of customers in a retail store of claim 46 further comprising a graphical user interface (GUI) that receives customer input from a terminal sales application and displays the customer input in a full screen display of the customer checkout accelerator.

51. The system for accelerating the sales transactions of customers in a retail store of claim 46 wherein the customer checkout accelerator server module contains processing logic that provides interfaces between a plurality of operational customer checkout accelerators in the retail store and credit or debit card service providers for payment authorization.

52. The system for accelerating the sales transactions of customers in a retail store of claim 47 wherein the customer checkout accelerator server module contains processing logic that provides interfaces between a plurality of terminal sales applications, each operating on a point sales terminal, and the preapproval database.

53. The system for accelerating the sales transactions of customers in a retail store of claim 47 wherein the customer checkout accelerator server module contains processing logic that provides access to the preapproval database.

54. The system for accelerating the sales transactions of customers in a retail store of claim 46 wherein the customer checkout accelerator server module contains processing logic that sends payment approval amount information to a terminal sales application at a point of sales terminal for caching in a preapproval cache.

55. The system for accelerating the sales transactions of customers in a retail store of claim 46 wherein the customer checkout accelerator server module contains processing logic that maintains and updates the preapproval cache and a preapproval database.

56. The system for accelerating the sales transactions of customers in a retail store of claim 46 wherein the customer checkout accelerator server module contains processing logic that updates and



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